

### REMARKS

In accordance with the foregoing, the drawings have been amended and claims 3, 7, 8, 11, 12, 16, 17, 18, and 19 have been amended.

Accordingly, claims 1-19 are pending and under consideration.

#### Objection to the Drawings

On page 2 of the Office Action, the Examiner objected to the drawings because these drawings did not include the legend –PRIOR ART--. In order to overcome these objections, replacement figures are submitted herewith. For the convenience of the Examiner, annotated sheets showing the changes made are also attached. In FIGS. 1 and 2, the legend – PRIOR ART—has been added. Approval of these changes to the Drawings and withdrawal of the objection to the drawings is respectfully requested.

#### Objection to Claim 12

Applicants amend claim 12 in accordance with the Examiner's suggestion to obviate this objection. Accordingly, withdrawal of the objection to claim 12 is respectfully requested.

#### Rejection of Claims 3, 7, 11, and 16 Under 35 U.S.C. §102(b)

Claims 3, 7, 11, and 16 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 6,146,094 issued to Obana et al. (hereinafter referred to as "Obana"). This rejection is respectfully traversed.

Obana does not disclose, teach, or suggest at least, "the front face of the rotating plate is bonded directly to the blades," as recited in claims 3, 7, 11, and 16.

Instead, Obana discloses a brazing metal layer 201, which melts and penetrates back plate 102 and blades 103 to bond the blades 103 to the back plate 102 (col. 5, lines 57-60). However, Obana's back plate 102 is not directly bonded to blades 103, because a metal layer 201 is bonding back plate 102 to the blades 103.

Therefore, for at least these reasons, claims 3, 7, 11, and 16 are patentably distinguishable over the prior art. Accordingly, withdrawal of this rejection is respectfully requested.

Rejection of Claims 12, 13, 15, 17, 18, and 19

Claims 12, 13, 15, 17, 18, and 19 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 1,919,970 issued to Woods. This rejection is respectfully traversed.

Applicants respectfully submit that Woods does not disclose, teach, or suggest at least, "joining corresponding first and second parts of the plurality of blades to each other by fusion bonding," as recited in claim 12.

Similarly, Applicants respectfully submit that Woods does not disclose teach or suggest at least, "a second turbofan part including a rotating plate and second blade parts integrally formed with the rotating plate, corresponding first and second blade parts being joined to each other at respective plane surfaces by fusion bonding," as recited in claim 17.

Similarly, Applicants respectfully submit that Woods does not disclose teach or suggest at least, "joining corresponding first and second blade parts of the first and second mold products to each other at respective plane surfaces thereof by fusion bonding," as recited in claim 18 and 19.

Therefore, for at least these reasons, claims 12, 17, 18, and 19 are patentably distinguishable from Wood.

Further claims 13 and 15 depend from claim 12 and include all of the features recited in claim 12 as well as additional features not taught or suggested by the cited reference. Therefore, for at least these reasons, claims 13 and 15 also patentably distinguish from the cited references.

Rejection of Claims 1, 2, 4, 5, 6, 9, 10, and 14 Under 35 U.S.C. §103(a)

Claims 1, 2, 4, 5, 6, 9, 10, and 14 are rejected under 35 U.S.C. §103(a) as being unpatentable over Woods in view of U.S. Patent 2,482,462 issued to Browne. This rejection is respectfully traversed.

Applicants respectfully submit that Woods and Browne, taken separately or in combination, do not disclose, teach, or suggest at least, "the first and second blade parts being joined to each other at the corresponding first and second plane surfaces by fusion bonding," as recited in claim 1.

Applicants respectfully submit that Woods and Browne, taken separately or in combination, do not disclose, teach, or suggest at least, "joining the first parts of the plurality of

blades to corresponding second parts of the plurality of blades by fusion bonding," as recited in claim 4.

Applicants respectfully submit that Woods and Browne, taken separately or in combination, do not disclose, teach, or suggest at least, "a second blade part integrally formed with the rotating plate such that the first blade part extends toward the rotating plate and the second blade part extends toward the shroud, the respective first and second blade parts of each of the plurality of blades being joined to each other by fusion bonding," as recited in claim 8.

Similarly, Applicants respectfully submit that Woods and Browne, taken separately or in combination do not disclose, teach, or suggest at least, "joining corresponding first and second parts of the plurality of blades to each other by fusion bonding," as recited in claim 12.

Similarly, Applicants respectfully submit that Woods and Browne, taken separately or in combination, do not disclose teach or suggest at least, "a second turbofan part including a rotating plate and second blade parts integrally formed with the rotating plate, corresponding first and second blade parts being joined to each other at respective plane surfaces by fusion bonding," as recited in claim 17.

Similarly, Applicants respectfully submit that Woods and Browne, taken separately or in combination, do not disclose teach or suggest at least, "joining corresponding first and second blade parts of the first and second mold products to each other at respective plane surfaces thereof by fusion bonding," as recited in claims 18 and 19.

As noted on page 4 of the Office Action, Woods does not disclose, teach, or suggest "fusion bonding." Instead, Woods discloses an impeller 10 having a center member 11 and end members or shrouds 17 and 18. In order to align the vanes of the end members, the center member 11 has slots to receive the vanes of shrouds 17 and 18.

The Office Action asserts that Browne teaches an impeller where two blade parts are bounded together by welding or brazing. However, Applicants respectfully submit that there is no motivation to combine Woods and Browne. Woods discloses an impeller with multiple blades and slots used to fix the multiple blades into position. In col. 2, lines 85-88, Woods states, "By interlocking the respective vanes in this manner the impeller is very strong and the likelihood of failure of any part is diminished to a negligible degree." Therefore, Woods does not even contemplate bonding vanes. One having ordinary skill in the art would have no

motivation to combine Browne with Woods.

Therefore, for at least these reasons independent claims 1, 4, 8, 12, 17, 18, and 19 are patentably distinguishable from the cited references.

Claim 2 depends directly from claim 1 and includes all of the features of claim 1. Therefore, for at least these reasons claim 2 is also patentably distinguishable over the cited references.

Claims 5 and 6 depend from claim 4 and include all of the features of claim 4. Therefore, for at least these reasons claims 5 and 6 are also patentably distinguishable over the cited references.

Claims 9 and 10 depend from claim 8 and include all of the features of claim 4. Therefore, for at least these reasons claims 9 and 10 are also patentably distinguishable over the cited references.

Claims 13, 14, and 15 depend from claim 12 and include all of the features of claim 12. Therefore, for at least these reasons, claims 13, 14, and 15 are also patentably distinguishable from the cited references.

Summary

Claims 1-19 are pending and under consideration. It is respectfully submitted that none of the references taken alone or in combination disclose the present claimed invention.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: August 18, 2005 By: Paul F. Daebeler  
Paul F. Daebeler  
Registration No. 35,852

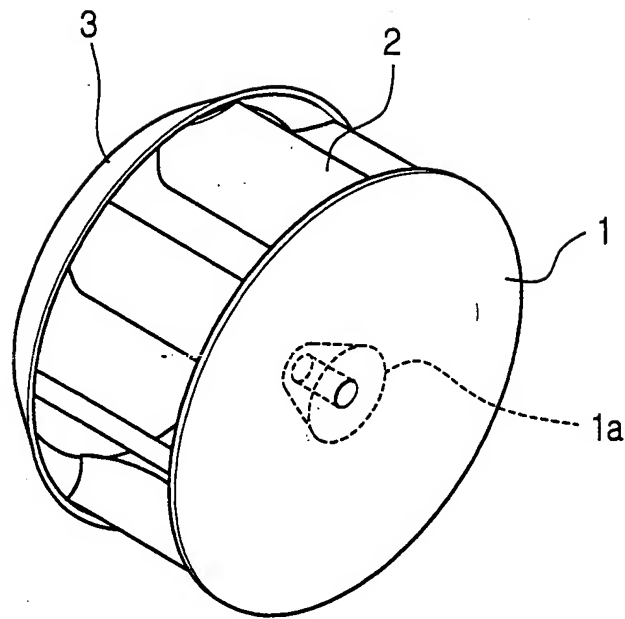
1201 New York Avenue, NW, Suite 700  
Washington, D.C. 20005  
Telephone: (202) 434-1500  
Facsimile: (202) 434-1501

**AMENDMENTS TO THE DRAWINGS:**

The attached drawing(s) include changes to FIGS. 1 and 2. The sheet containing FIG. 1 replaces the original sheet including FIG. 1, and the sheet containing FIG. 2 replaces the original sheet including FIG. 2. In FIGS. 1 and 2, please ADD the legend –PRIOR ART–.

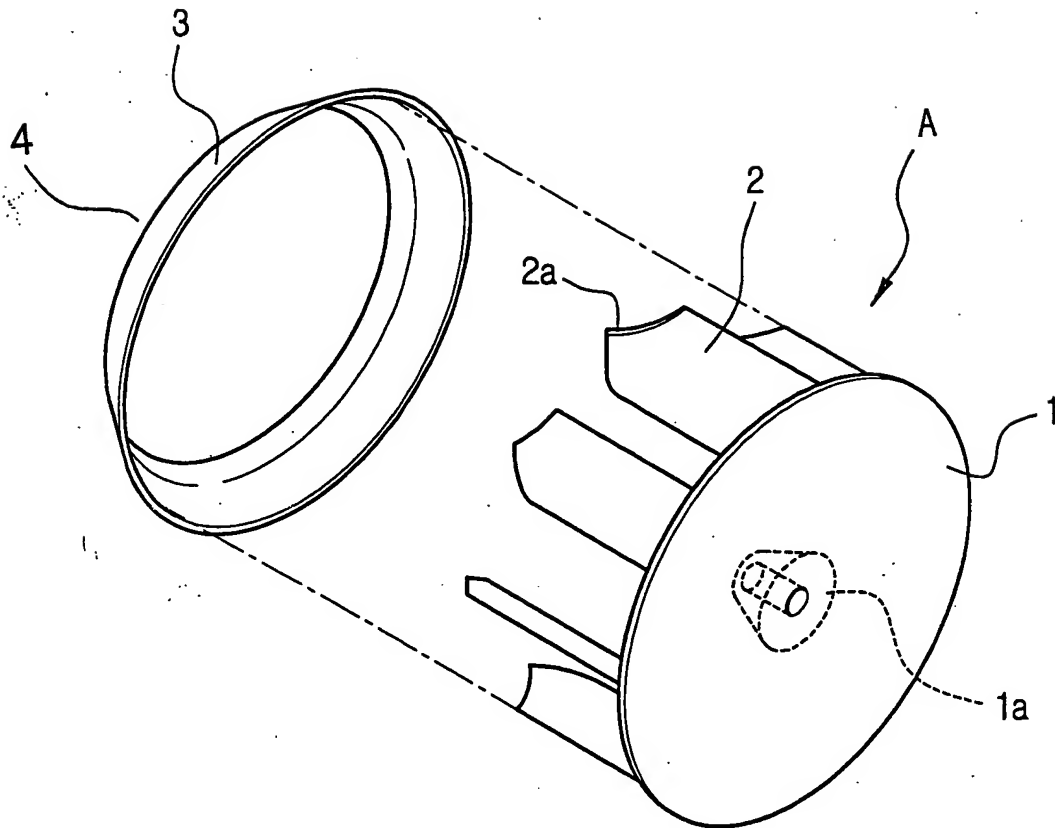
For the convenience of the Examiner, annotated sheets showing the changes made are also attached. Approval of these changes to the Drawings is respectfully requested.

FIG. 1



PRIOR ART

FIG. 2



PRIOR ART